

#### Abstract of the Disclosure

Since an abnormality is judged by executing a square calculating process with respect to  $\sin \theta$  and  $\cos \theta$  for detecting an abnormality in an angular resolver, a processing time is elongated, and a burden to a CPU is great. Since the invention prepares a map which can judge whether the combination of  $\sin \theta$  and  $\cos \theta$  is normal or abnormal, and judges by mapping the combination of the detected  $\sin \theta$  and  $\cos \theta$ , a process can be easily executed, a processing speed is high, and a burden to the CPU can be reduced. Further, an assist can be maintained by controlling a motor by a rectangular wave current by detecting a rotation angle signal at low resolution level, such as Hall sensors arranged around the motor.